

# FLK 50/EZ-DR/D37SUB/100/Y81P-O - Cable



2302609

<https://www.phoenixcontact.com/us/products/2302609>

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Round cable set; controller: Mitsubishi Electric MELSEC Q (Y81P); connection 1: D-SUB socket strip (1x 37-position); connection 2: IDC/FLK socket strip (1x 50-position); cable length: 1 m

## Commercial data

Item number	2302609
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	C421
Product key	CK2143
Catalog page	Page 482 (C-5-2019)
GTIN	4017918910259
Weight per piece (including packing)	306.9 g
Weight per piece (excluding packing)	306.9 g
Customs tariff number	85444290
Country of origin	DE

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## Technical data

### Product properties

Product type	System cable
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### Environmental and real-life conditions

#### Ambient conditions

Degree of protection	IP00
Degree of protection (Installation location)	≥ IP54 (Installation location)
Ambient temperature (operation)	-40 °C ... 70 °C (fixed installation)
	-10 °C ... 70 °C (flexible installation)
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Altitude	≤ 2000 m

### Electrical properties

Operating voltage (AC)	≤ 30 V AC
Operating voltage (DC)	≤ 60 V DC
Nominal operating mode	100% operating factor
Current (Per path, 50°C)	≤ 1 A (Uncoiled, see derating)
Current (Per path, 70°C)	≤ 0.6 A (Uncoiled, see derating)

#### Supported controller MITSUBISHI MELSEC Q

Suitable I/O card	QY81P
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### Cable/line

Cable length	1 m
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#### 50X0.14 [PVC]

UL AWM Style	2464/1061
Number of positions	50
Shielded	no
Cable type	50X0.14 [PVC]
Conductor type	Round cable set
Conductor structure signal line	7x 0.16 mm
AWG signal line	26
Conductor cross section	50x 0.14 mm <sup>2</sup>
Wire diameter incl. insulation	1 mm ±0.03 mm
External cable diameter	10.30 mm ±0.4 mm
Outer sheath, material	Semi-rigid PVC
External sheath, color	gray
Conductor material	Tin-plated Cu litz wires
Cable resistance	≤ 145 Ω/km (20 °C)
Insulation resistance	≥ 20 MΩ*km (20 °C)
Smallest bending radius, fixed installation	86 mm

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Smallest bending radius, movable installation	161 mm
Max. bending cycles	5000 (at a radius of $\geq 15x$ outside diameter)
Halogen-free	no
Flame resistance	IEC 60332-1-2 (raw cable)
	VDE 0842, Part 332-1-2 (raw cable)
	IEC 60332-3-22 (raw cable)
	UL VW-1
	CSA FT-1
Resistance to oil	can withstand occasional splashes (raw cable)
D-SUB37 (17)	IDC/FLK50 (1) = black
D-SUB37 (18)	IDC/FLK50 (2) = brown
D-SUB37 (1)	IDC/FLK50 (3) = red
D-SUB37 (20)	IDC/FLK50 (4) = orange
D-SUB37 (2)	IDC/FLK50 (5) = yellow
D-SUB37 (21)	IDC/FLK50 (6) = green
D-SUB37 (3)	IDC/FLK50 (7) = blue
D-SUB37 (22)	IDC/FLK50 (8) = violet
D-SUB37 (4)	IDC/FLK50 (9) = gray
D-SUB37 (23)	IDC/FLK50 (10) = white
D-SUB37 (19)	IDC/FLK50 (11) = white-black
D-SUB37 (37)	IDC/FLK50 (12) = white-brown
D-SUB37 (17)	IDC/FLK50 (13) = white-red
D-SUB37 (18)	IDC/FLK50 (14) = white-orange
D-SUB37 (5)	IDC/FLK50 (15) = white-yellow
D-SUB37 (24)	IDC/FLK50 (16) = white-green
D-SUB37 (6)	IDC/FLK50 (17) = white-blue
D-SUB37 (25)	IDC/FLK50 (18) = white-violet
D-SUB37 (7)	IDC/FLK50 (19) = white-gray
D-SUB37 (26)	IDC/FLK50 (20) = brown-black
D-SUB37 (8)	IDC/FLK50 (21) = brown-red
D-SUB37 (27)	IDC/FLK50 (22) = brown-orange
D-SUB37 (19)	IDC/FLK50 (23) = brown-yellow
D-SUB37 (37)	IDC/FLK50 (24) = brown-green
D-SUB37 (17)	IDC/FLK50 (25) = brown-blue
D-SUB37 (36)	IDC/FLK50 (26) = brown-violet
D-SUB37 (9)	IDC/FLK50 (27) = brown-gray
D-SUB37 (28)	IDC/FLK50 (28) = brown-white
D-SUB37 (10)	IDC/FLK50 (29) = green-black
D-SUB37 (29)	IDC/FLK50 (30) = green-brown
D-SUB37 (11)	IDC/FLK50 (31) = green-red
D-SUB37 (30)	IDC/FLK50 (32) = green-orange
D-SUB37 (12)	IDC/FLK50 (33) = green-blue
D-SUB37 (31)	IDC/FLK50 (34) = green-violet
D-SUB37 (19)	IDC/FLK50 (35) = green-gray

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D-SUB37 (37)	IDC/FLK50 (36) = green-white
D-SUB37 (36)	IDC/FLK50 (37) = yellow-black
D-SUB37 (18)	IDC/FLK50 (38) = yellow-brown
D-SUB37 (13)	IDC/FLK50 (39) = yellow-red
D-SUB37 (32)	IDC/FLK50 (40) = yellow-orange
D-SUB37 (14)	IDC/FLK50 (41) = yellow-blue
D-SUB37 (33)	IDC/FLK50 (42) = yellow-violet
D-SUB37 (15)	IDC/FLK50 (43) = yellow-gray
D-SUB37 (34)	IDC/FLK50 (44) = yellow-white
D-SUB37 (16)	IDC/FLK50 (45) = gray-black
D-SUB37 (35)	IDC/FLK50 (46) = gray-brown
D-SUB37 (19)	IDC/FLK50 (47) = gray-red
D-SUB37 (37)	IDC/FLK50 (48) = gray-orange

## Connection data

### Connection 1

Connection in acc. with standard	IEC 60807-2
	DIN 41652
Connection method	D-SUB socket strip
Screw thread	UNC 4-40
	M2,5
Number of connections	1
Number of positions	37
Tightening torque	0.2 Nm
Insertion/withdrawal cycles	> 200
Pitch	2.77 mm

### Connection 2

Connection in acc. with standard	based on IEC 60603-13
Connection method	IDC/FLK socket strip
Number of connections	1
Number of positions	50
Insertion/withdrawal cycles	> 50
Pitch	2.54 mm

## Notes

General	For proper use, the specifications of the installation directive (see Downloads) must be observed. For applications or use with third-party products, the specifications, and the safety and warning instructions of the respective third-party manufacturer must also be met.
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## Classifications

### ECLASS

ECLASS-11.0	27242220
ECLASS-12.0	27242220
ECLASS-13.0	27242220

### ETIM

ETIM 9.0	EC000237
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### UNSPSC

UNSPSC 21.0	26121600
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## Environmental product compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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